

ABSTRACT OF THE DISCLOSURE

A motor actuation device is constructed of a motor a reduction gear train and a detection mechanism. The reduction gear train includes a worm gear and a worm wheel. The worm gear is fixed to a rotary shaft of the motor and meshes with the worm wheel. The worm wheel transmits the rotation of the motor to the lens barrel to slide it along an optical axis. The detection mechanism includes a first spur gear, an idle gear, a second spur gear, an impeller and a photo interrupter. The first spur gear is molded with the worm gear integrally. The idle gear meshes with the first spur gear and the second spur gear. When the motor causes the rotation, a blade of the impeller passes in the photo interrupter and a pulse is generated from the photo interrupter.

15